



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,649	01/27/2004	Younger Ahluwalia	03398.000006.	4007

5514 7590 11/03/2010
FITZPATRICK CELLA HARPER & SCINTO
1290 Avenue of the Americas
NEW YORK, NY 10104-3800

EXAMINER

CHANG, VICTOR S

ART UNIT	PAPER NUMBER
----------	--------------

1788

MAIL DATE	DELIVERY MODE
-----------	---------------

11/03/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

1 RECORD OF ORAL HEARING
2
3 UNITED STATES PATENT AND TRADEMARK OFFICE
4

5
6 BEFORE THE BOARD OF PATENT APPEALS
7 AND INTERFERENCES
8

9
10 *Ex parte* YOUNGER AHLUWALIA, MATTI KIIK,
11 and THOMAS D. KAROL
12

13
14 Appeal 2010-001528
15 Application 10/766,649
16 Technology Center 1700
17

18
19 Oral Hearing Held: June 10, 2010
20
21

22
23 Before CHARLES F. WARREN, CATHERINE Q. TIMM, and
24 STEPHEN WALSH, *Administrative Patent Judges*.
25

26
27 APPEARANCES:
28

29
30 ON BEHALF OF THE APPELLANT:
31

32
33 ALICIA RUSSO, ESQUIRE
34 JOHN D. MURNANE
35 Fitzpatrick, Cella, Harper & Scinto
36 1290 Avenue of the Americas
37 New York, New York 10104-3800
38

1 The above-entitled matter came on for hearing on Thursday, June 10,
2 2010, commencing at 1:49 p.m., at the U.S. Patent and Trademark Office,
3 600 Dulany Street, Alexandria, Virginia, before Christine L. Loeser, Notary
4 Public.

5 JUDGE WARREN: Good afternoon, Ms. Russo.

6 MS. RUSSO: Good afternoon.

7 JUDGE WARREN: As you know, counselor, you have 20 minutes and you
8 may proceed when ready.

9 MS. RUSSO: Thank you. My name is Alicia Russo as we have established.
10 I'm here with Mr. John Murnane and together we represent the Applicants
11 for this application.

12 We are from the New York office of Fitzpatrick, Cella, Harper & Scinto. I
13 would like to approach the bench. I have some demonstratives that I think
14 they could be helpful for you.

15 JUDGE WARREN: Are they in the record?

16 MS. RUSSO: I'm sorry?

17 JUDGE WARREN: Are your exhibits in the record?

18 MS. RUSSO: Yes, they are.

19 JUDGE WARREN: They were presented to the Examiner?

20 MS. RUSSO: They were presented, they are actually part of the record and
21 the claim but I have highlighted them so as I discuss the case with you, it
22 may be easier for you to see what we are pointing to.

23 JUDGE WARREN: Are your arguments in the Brief that you are going to
24 discuss with the exhibits?

25 MS. RUSSO: Yes, they are.

1 JUDGE WARREN: Okay. I have the claim and two of the prior art
2 references.

3 MS. RUSSO: The claims are currently rejected under 35 USC 103 as
4 obvious, based on three references, two of which I have handed you because
5 I have highlighted them. I have also given you the claim and I have got a
6 blown-up copy here.

7 The claim relates to the heat insulating and fire resistant composite material.
8 It comprises a first layer which comprises a prefabricated microcells
9 component, a surfactant component, surfactant-generated microcells, a filler
10 component and a binder competent, and it also comprises a second layer that
11 comprises a metallic component that adheres to the first layer.

12 Lynn, as I have mentioned, the claims are rejected based on the Lynn,
13 Horner and Smart. Lynn does not teach or suggest a surfactant component,
14 surfactant-generated microcells and the prefabricated microcells component.
15 Horner does not teach or suggest a second layer, comprising metallic
16 component adheres to the first layer and also doesn't teach or suggest
17 prefabricated microcells. In fact, Horner teaches away from including a
18 metallic layer adhered to the first layer and Morton only teaches or it doesn't
19 teach pretty much any components there except for the prefabricated
20 microcells component.

21 This is the fourth different position that the office has taken as to what it felt
22 was prima facie obvious. In the first office action, which was dated
23 November 2nd, 2005, the claims were rejected based on Horner --

24 JUDGE WARREN: Counselor, what does that have to do with your brief?

25 MS. RUSSO: I'm just giving context because I think it will be helpful to the
26 board as I develop the arguments to know the context.

1 JUDGE WARREN: Your arguments are restricted to your Brief and your
2 Reply Brief.

3 MS. RUSSO: These arguments are all of record in the file and I believe --

4 JUDGE WARREN: But they are not in your Brief.

5 MS. RUSSO: I still believe that it will help to give context to what I am
6 going to go over that is in the Brief. If you will permit me to go through
7 some of these things that occurred, I believe it will add context to what I'm
8 going to discuss.

9 JUDGE WARREN: Okay.

10 MS. RUSSO: In the first office action, the claims were rejected over Horner
11 in view of Zucker. There, the Examiner said that Horner taught all the
12 elements of the claim with the exception of the prefabricated microcells
13 component.

14 The Applicant overcame that rejection, arguing that Horner did not teach the
15 second layer and also that the combination of Horner and Zucker did not
16 teach the claim and then a new round of rejection was raised, the second
17 round, in an office action dated May 23, 2006.

18 There the Examiner then rejected the claims based on Horner as the primary
19 reference again and added Lynn which is part of the rejection now in
20 Morgan. When the Examiner made those rejections, they were again
21 overcome, and the arguments were consistent that Horner doesn't teach us
22 actually away from the second layer, the metallic component.

23 JUDGE WARREN: Counselor, the Examiner stated a position in the
24 answer.

25 MS. RUSSO: Yes.

1 JUDGE WARREN: Do you have a problem with the position as the
2 Examiner stated it in the answer?

3 MS. RUSSO: Yes, I do.

4 JUDGE WARREN: Did you state that problem that you have in the Reply
5 Brief?

6 MS. RUSSO: I did, and it's consistent with everything else we have said in
7 this case which is why I think it is relevant for me to --

8 JUDGE WARREN: Your statement on page 4 of your Reply Brief, which
9 you now did not state in your Brief, is the fact that you say that the office
10 fails to acknowledge that the specified class of materials proposed by Lynn
11 for the facing sheets 11 or 12 comprise a large number of substances in quite
12 different properties and must require a different, additional analysis for
13 determining whether the various combination of these materials are
14 compatible depending on how they are assembled to reach a proposed
15 combination.

16 Is that the basis for your argument?

17 MS. RUSSO: It's one of the bases of our argument, and we have other bases
18 that are in the Brief which is that Horner doesn't teach or teaches away from
19 a metallic layer adhered and also that Horner and --

20 JUDGE WARREN: Can you point in the Brief where your teaching away
21 argument is presented?

22 MS. RUSSO: I apologize. I will come back to that but I would like to point
23 out that the -- our Appeal Brief addresses the present rejections.

24 I'm just noting the history right now of what occurred, and I think it's
25 important for context. If I may, I will just continue with that.

1 When Horner was used as a primary reference with the reliance of Lynn as
2 providing the second layer, it was, well, that rejection was overcome and it
3 was overcome by noting that Horner teaches away from including the
4 second layer.

5 And, in fact, in an October 19, 2007, office action the Examiner withdrew
6 Lynn and Morgan. Morgan was utilized to provide teaching of prefabricated
7 microcells. Those two references were actually withdrawn as the basis of
8 rejection.

9 A third ground of rejection was then raised and it was Horner in view of
10 Martin. Martin was also one of the references that is now grounds for
11 rejection.

12 That was also overcome. The Examiner relied on Horner for what he had
13 previously relied on for the surfactants factory-generated microcells, a filler
14 component and a binder component and looked to Martin for the teaching of
15 prefabricated microcells and metallic component adhered to the first layer.

16 That was overcome by noting that Martin does not teach a metallic
17 component adhered to a first layer. Martin teaches prefabricated microcells
18 that have a metallic coating on the inside and outside of the microcells.

19 Those microcells would then be used in the coating to acquire insulated
20 properties.

21 The Applicant successfully overcame that and the rejection was withdrawn.

22 The pending ground is the fourth ground of rejection and is now on appeal.

23 That rejection now relies on Lynn as the primary reference rather than
24 Horner, and it supplements Lynn with teachings of Horner and Martin.

25 Again, the rejections based on Horner and Martin were previously
26 withdrawn.

1 We, in relying on Lynn as the primary reference, the office acknowledges
2 that Lynn does not teach the surfactant component, surfactant generated
3 microcells and prefabricated microcells. But now, instead of using Horner
4 as the main reference, the office is taking just what it needs from Horner to
5 say that the claim is obvious.

6 However, the combination of Horner and Lynn, no matter how it's presented,
7 is still the same as what was presented previously and that is that Horner and
8 Lynn together teach prefabricated microcell component, surfactant
9 components, factory-generated microcells, filler competent and a binder
10 component and a second layer comprising a metallic component.

11 The prefabricated microcells component comes from Martin but in the past it
12 was coming from Morgan, but now the claim is deemed to be prima facie
13 obvious, based on the component combination with Martin being provided
14 rather than Morgan so there seems to be now a development of an argument
15 that was very similar to the past that Applicants overcame and, however,
16 without any further explanation as to why this change of using Lynn as the
17 primary reference rather than Horner, why that makes this suddenly obvious
18 again.

19 We would like to point out that, as argued before and as based on --

20 JUDGE WARREN: Counselor, you do realize that by rule, we are
21 considering the arguments that you have made in the Brief and the Reply
22 Brief --

23 MS. RUSSO: Yes, I do and that is what I am going to talk about right now.

24 JUDGE WARREN: -- and considering the Examiner's position as stated in
25 the answer.

26 MS. RUSSO: I do realize that.

1 I am just merely pointing out, and I will go through it, that why I think this
2 is relevant.

3 Applicant's previous arguments are still relevant to the office actions that
4 were previously presented and the art that was previously presented.

5 We have pointed out in the Brief that, and we have already persuaded the
6 Examiner, that Horner and Lynn, together with a reference such as Morgan,
7 which provides prefabricated microcells, does not render the claim obvious.
8 Part of that argument is that Horner relates that a thick facer whereas Lynn
9 relates to a thin facer and the skilled artisan looking at those two things
10 wouldn't be motivated to combine them.

11 JUDGE WARREN: Can you tell us where in your Brief you have stated
12 why one of ordinary skill in this art would not have separated the coating of
13 Horner from the mat of Horner and applied only the coating of Horner to the
14 inner-facing layer 17 and 18 of Lynn?

15 MS. RUSSO: I did not argue in the Brief that the skilled artisan would not
16 be motivated to do that. I was addressing what had I felt addressed the
17 rejection. However, we have argued that before.

18 JUDGE WARREN: But the Examiner's position in the answer is only the
19 coating, not the mat, is transferred to have used from Horner to coat the
20 inner-facing layers 17 and 18 of Lynn.

21 MS. RUSSO: What we did say is that the Examiner has not provided a
22 reasoning as to why the skilled artisan would do that and his rejection, as
23 well as what is in the Examiner's answer, is deficient in the reasoning, and
24 we believe that even more so there's a deficiency because we have already
25 overcome these rejections, so what has changed?

26 We have already indicated that the substrate is a required element. We

1 submitted a declaration that indicates that that is a required element. You
2 need the substrate --

3 JUDGE WARREN: Is the declaration part of your Brief?

4 MS. RUSSO: It is not part of the Brief but it also was in response to a
5 different rejection rather than what is here now. This rejection hasn't
6 articulated what the Examiner believes would be the reasons why the skilled
7 artisan would do what he suggested.

8 JUDGE WALSH: I read the Examiner to find that the references taught
9 features of the various coatings and boards and so forth that would have
10 improved durability and other properties, and that the Examiner referred to
11 those advantages taught in the references as being a motivating factor for
12 combining the features of the boards. Why was the Examiner wrong about
13 that?

14 MS. RUSSO: The Examiner -- durability is not the focus of Horner. If the
15 desire is to improve Lynn to make it more durable, Horner doesn't provide
16 that teaching, nor does Martin.

17 Horner concerns providing a -- providing greater heat-insulating properties
18 and to avoid cold temperature delamination which occurs when the process
19 of making these boards is being done.

20 JUDGE WALSH: As I understood the Examiner's point, the Examiner
21 mentioned both durability and I think heat properties or thermal insulation
22 back.

23 If one reference in the prior art talked improving durability and another
24 talked about improving thermal insulation value, why was the Examiner
25 wrong to put the two together and join both of those, to combine both
26 advantages in one?

1 MS. RUSSO: I believe the Examiner was wrong in that regard because
2 Lynn teaches facers that are thin. He describes them as films. They are
3 even claimed as being films. They are between .3 and 5 mils.
4 Horner teaches a much thicker substrate which is comprised of a -- I'm sorry,
5 a thicker face which is comprised of substrate and coating, and the substrate
6 is between 10 and 30 mils and the coating is between 5 and 100 mils. So
7 together that facer is anywhere from 15 to 130 mils, which is about 3 to 433
8 times thicker. It is a very different thing.

9 The properties that are associated with that, of course, are going to be very
10 different.

11 JUDGE WALSH: Is there any evidence that the properties associated with
12 the Horner and Lynn materials would be very different in some relevant way
13 if their thicknesses were changed?

14 MS. RUSSO: Horner talks about foaming the coating. Foaming will
15 increase thickness. It does discuss, and give me just a minute and I will
16 point you to it, that that foaming that is in column 4, it is not highlighted for
17 you, but it is at column 4, lines 32 to 34, the consistency of the foam was
18 such that the coating mixture does not penetrate through the mat and
19 simulates the consistency of shaving cream.

20 So you want the foam because you don't want penetration through the mat.
21 The reason why you don't want penetration through the mat is because you
22 want to keep, and it teaches this as well, you want to keep the interstices of
23 the mat open so that when you apply it to the core of the board, it adheres
24 better to that foam core and that's the purpose of Horner.

25 JUDGE WALSH: What's the evidence that a person who works in this art
26 would see it that way?

1 MS. RUSSO: The spec says that that's what the intention is, that that's what
2 you want to do.

3 The spec indicates that you get a better bonding strength. This is at column
4 5, lines 4 through 8, that I have highlighted for you.

5 It indicates the bonding strength between uncoated fibers and the core
6 material in the resulting product is enhanced due to the reduced penetration
7 of the coating mixture into the mat by reason of its prefoamed state. It's the
8 teaching of Horner.

9 In contrast, Lynn teaches thinner facers. You are not foaming. You are not
10 going to have, obviously, you don't have surfactant and you won't have
11 surfactant-generated microcells. If you foam a coating, you are going to
12 increase the volume. You are adding air.

13 We believe, for the reasons that I stated, that Horner relates to a thinner -- a
14 thicker coating and Lynn relates to the thinner coating that they wouldn't be
15 combined. We pointed that out in our Briefing. We think that the Examiner
16 is clearly relying on impermissible hindsight.

17 We have also, as I have mentioned, Applicants have stated that the office has
18 failed to provide the required articulated reasoning with some rational
19 underpinning as to why these two references, these three references would
20 be combined to arrive at the claimed invention.

21 As I noted before, the Examiner already acknowledged that the combination
22 of Horner and Lynn didn't render the claim obvious and whether it includes
23 Morgan for prefabricated microcells or Martin is pretty much the same issue.
24 So with that in mind, it seems that greater articulation would be required to
25 support a prima facie case of obviousness. We rely on KSR for this position
26 which states that rejections based on obviousness grounds can't be

1 sustained by mere conclusory statements. Instead there must be some
2 articulated reasoning with some rational underpinnings to support the legal
3 conclusion of obviousness.

4 We have also pointed to *Sud-Chemie* which is 554 F.3d 1001 where the
5 Federal Circuit also acknowledged that you need a greater analysis,
6 particularly in the field of composite technology which is what this field is.

7 And they stated that the District Court failed to acknowledge that the
8 specified classes of materials comprised a large number of substances with
9 quite different properties and that the various combinations can be
10 compatible or incompatible depending on how they are assembled.

11 We recently sent the Board an unpublished --

12 JUDGE WALSH: A question about that mention about incompatibilities.

13 Was there an argument in your Brief that materials of Lynn and Horner are
14 incompatible?

15 MS. RUSSO: We didn't argue that the materials were necessarily
16 incompatible. We did argue that the two separate facers are different and
17 you wouldn't combine them.

18 JUDGE WARREN: Counselor, your time has been well exceeded. If you
19 would finish, just give us a summary if that is appropriate.

20 MS. RUSSO: Okay. In summary, the invention, as I noted, relates to a
21 heat-insulating and fire-resistant composite material, comprising of a first
22 layer which comprises a prefabricated microcells component, a surfactant
23 component, surfactant-generated microcells, a filler component and a binder
24 component and a second layer comprising of a metallic component adhered
25 to the first layer.

1 Lynn lacks the teaching of a surfactant component, surfactant-generated
2 microcells and prefabricated microcells. The office has acknowledged in
3 2007 that the combination of Lynn and Horner didn't render this claim
4 obvious and nothing has changed since then.

5 There's nothing in Martin that cures the deficiency and the applicant also
6 overcame rejection based on Horner and Martin.

7 We do note, in summary, that the case we recently sent you, In re
8 Vaidyanathan, specifically notes that varying positions that were taken by
9 the Examiner before and during the process and noted that these varying
10 positions further indicated the lack of reasoning for the rejection, and we
11 believe that there have been numerous varying positions here, too.

12 In summary, we respectfully request that you reverse the rejections. Thank
13 you.

14 JUDGE WARREN: Thank you, counselor. The proceeding is terminated.

15 Whereupon, the proceedings, at 2:19 p.m., were concluded.

16